

CLAIMS

What is claimed is:

1. A method for use in identifying a frame type of one or more frames
5 wirelessly communication, comprising:
receiving a wireless communication containing a frame having a plurality of
bearer bits;
determining when the frame passes a predefined quality parameter;
analyzing at least a portion of the bearer bits within the frame when the frame
10 does not pass the predefined quality parameter; and
determining when the frame is an erased frame based on the analyzing of the
portion of the bearer bits within the frame.
2. The method of claim 1, further comprising:
15 determining when the frame is a discontinuous transmission mode (DTX)
frame, comprising analyzing a header of the frame; and
determining when the header comprises an expected series of bits.
3. The method of claim 2, further comprising:
20 requesting an increase in a transmit power when the frame is an erased frame;
and
maintaining the transmit power when the header comprises an expected series
of bits.
4. The method of claim 2, wherein the determining when the frame is a DTX
25 frame comprises comparing at least a portion of the header with a previously received
sequence number.
5. The method of claim 2, further comprising:
30 defining the frame as an erased frame when the header comprises the expected
series.

6. The method of claim 1, wherein the analyzing at least the portion of the bits comprises:

counting a number of zero bearer bits within at least a tail end of the frame;
determining when the number of zero bits exceeds a predefined threshold; and
5 defining the frame as an erased frame when the number of zero bits exceeds the predefined threshold.

7. The method of claim 6, wherein the analyzing the portion of the bits comprises:

10 determining when a header comprises an expected sequence when the number of zero bits does not exceed the predefined threshold;
defining the frame as an erased frame when the header comprises the expected parameter; and
defining the frame as a DTX frame when the header does not comprise the
15 expected parameter.

8. A method for enabling wireless communication, comprising:
receiving a wireless communication containing a frame having a plurality of
bits;

20 determining when the frame satisfies a quality check;
analyzing at least a portion of the bits within the frame when the frame does not satisfy the quality check;
determining when the at least the portion of the bits analyzed exceeds a threshold; and
25 identifying the frame as a discontinuous transmission (DTX) when the analyzing of the at least the portion of the bits fails to exceed the threshold.

9. The method of claim 8, further comprising:
determining when the frame comprises an expected sequence of bits; and
30 performing the identifying the frame as the DTX when the frame does not comprise the expected sequence.

10. The method of claim 9, wherein the analyzing the at least the portion of the bits comprises counting a number of bearer bits with zero values in a tail end of the frame;
the determining when the at least the portion of bits analyzed exceeds the threshold comprises determining when the number of bearer bits with zero values in the tail
5 end exceeds the threshold; and

initiating the determining when the frame comprises the expected sequence of bits when the number of bearer bits with the zero values in the tail end does not exceed the threshold.

10 11. The method of claim 8, further comprising:
receiving a plurality of wireless communications each containing the frame having the plurality of bits;
selecting one of the plurality of communications; and
the determining when the frame satisfies the quality check comprises
15 determining when the frame of the selected one of the plurality of communications satisfies the quality check.

12. The method of claim 8, further comprising:
receiving a plurality of wireless communications each containing the frame
20 having the plurality of bits;
comparing bit values of a first bit from each of the frames from the plurality of wireless communications;
determining when there is a difference between the bit values for the first bit of each of the frames from the plurality of wireless communications;
25 determining when there is a majority bit value of the first bit having bit values found to be different;
assigning the majority bit value to the first bit when the first bits from each of the frames of each of the wireless communications are found to be different; and
regenerating the frame such that the first bit has the majority bit value when the
30 first bit from each of the frames of each of the wireless communications are found to be different.

13. The method of claim 8, further comprising:

receiving a plurality of wireless communications each containing the frame
having the plurality of bits;

5 comparing bit values of the plurality of bits of each of the frames from the
plurality of wireless communications;

determining when there is a difference between the bit values for the plurality of
bits of each of the frames from the plurality of wireless communications;

determining when there is a majority bit value of the bit values found to be
different;

10 assigning the majority bit value to the bits found to be different; and
regenerating the frame with the bits found not to be different and the bits
assigned the majority bit values.

14. The method of claim 8, further comprising:

15 identifying the frame as an erased frame when the at least the portion of the bits
analyzed exceeds the threshold; and

controlling a power when the frame is identified as an erased frame.

15. The method of claim 14, further comprising:

20 determining when the frame comprises an expected sequence of bits;
performing the identifying the frame as the DTX when the frame does not
comprise the expected sequence; and

the identifying the frame as an erased frame comprises identifying the frame as
an erased frame when the frame comprises the expected sequence of bits.

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16. The method of claim 8, further comprising:

maintaining a previous transmit power level when the frame is identified as a
DTX.

17. An apparatus for use in providing wireless communication, comprising:
a transceiver that receives a wireless communication containing a frame having
a plurality of bits;

5 a frame error code decoder configured to determine when the frame satisfies a
quality check;

a frame type determination device coupled with the frame error code decoder,
wherein the frame type determination device is configured to analyze at least a portion of
the bits within the frame when the frame does not satisfy the quality check and to
determine when the at least the portion of bits analyzed exceeds a threshold; and

10 a frame type verification device coupled with the frame type determination
device, wherein the frame type verification device is configured to identify the frame as a
discontinuous transmission mode (DTX) when the at least the portion of the bits fail to
exceed the threshold.

15 18. The apparatus of claim 17, further comprising:

a radio link protocol (RLP) receiver coupled with the transceiver, wherein the
RLP receiver is configured to determine when the frame comprises an expected sequence
of bits; and

20 the frame type determination further initiates the frame type verification device
to identify the frame as the DTX when the frame does not comprise the expected sequence.

19. The apparatus of claim 18, wherein the frame type determination device is
further configured to count a number of bits with predefined values, and determine when
the number of bits with the predefined values exceeds the threshold.

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20. The apparatus of claim 17, further comprising a base transceiver station
comprising the transceiver, the frame error code decoder, the frame type determination
device and the frame type verification device.